REMARKS

At the outset, Applicants thank Examiner Swartz for his time and consideration of the above-identified application during the interview with the undersigned. During the interview, Examiner Swartz and the undersigned discussed ways in which to amend the claims to overcome the issues raised in the outstanding Official Action. In the regard, applicants thank Examiner Swartz for his suggestions. The present amendment incorporates the changes to the claims as suggested by Examiner Swartz and discussed at the interview. Accordingly, Applicants respectfully submit that present application has been amended in a manner that is believed to place it in condition for allowance.

Claims 27-35, 37-43, 45-46 and 48 are pending the application. Claims 36, 44 and 47 have been canceled without prejudice. The canceled claims may be the subject of a future application.

Claims 32, 37 and 45 were objected for containing several informalities. Claims 32, 37 and 45 have been amended to address these informalities. Applicants also thank the Examiner for the suggestions as how to overcome the objections.

Claim 38 was rejected under 35 U.S.C. 101 for allegedly being directed to non-statutory subject matter. This rejection is respectfully traversed.

Applicants amend claim 38 to recite an "isolated" nucleotide sequence. As a result, applicants submit that claim 38 can not be directed to a product of a nature and ask that the rejection be withdrawn.

Claims 27-31, 35, 42-44 and 47 were rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. These rejections are traversed.

Claim 27 has been amended so that the term "derived" is no longer recited. In addition, claim 27 has been amended so that the claim no longer recites "of" a

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sequence.

Claims 29 and 30 have been amended to further characterize the "stringent conditions". Support for the changes to the claims may be found on page 22 of the present specification.

Claim 31 has been amended to recite an isolated polypeptide, which is encoded by the isolated polynucleotide of claim 27 or 28. Thus, it clear to one skilled in the art that the polypeptide is encoded by the polynucleotide of claim 27 or claim 28 and not some other sequence that may be associated with the polynucleotide. Both of claims 42 and 43 ultimately depend from claim 31. Claims 44 and 47 have been canceled.

Claim 33 has been amended to delete the phrase "1(TS1)". In addition, claim 33 has been amended to delete the reference to the nucleotide sequence.

Claim 34 has been amended to delete the term "2(TS2)".

As suggested by the Examiner, claim 35 has been amended to recite "an isolated polynucleotide". Applicants thank the Examiner for the suggestion as how to overcome this rejection.

Claim 36 has been canceled.

Claim 44 has been canceled.

As to claims 45 and 46, the claims have been amended to avoid use of the phrase "with the help of".

Claim 47 has been canceled.

Claim 48 has been amended so that the phrase "an effective amount" is no longer recited.

Applicants believe that the present application is now in condition for allowance at the time of the next Official Action. In that all the changes to the claims are merely of a former nature, Applicants respectfully submit that the changes are non-narrowing in scope.

In view of the present amendment and the foregoing remarks, therefore, Applicants believe that the present application is in condition for allowance at the time Appl. No. 10/538,840

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of the next Official Action. Allowance and passage to issue in that basis is respectfully requested.

If the Examiner does not believe that the present amendment places the application in condition for allowance, the Examiner certainly is invited to contact the undersigned to expedite prosecution of the present application.

Respectfully submitted, BACON & THOMAS, PLLC

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